DOCUMENT RESUME

ED 089 837 PS 006 883

TITLE	Early Identification of Learning Disabilities: A Discussion and Approach.
INSTITUTION	Prescriptive Educational Systems, Akron, Ohio.
PUB DATE	[73]
NOTE	23p.; Ten pages of the original document containing "Early Identification Screening Inventory Data" are copyrighted and therefore not available for reproduction. They have not been included in the pagination
EDRS PRICE	MF-$0.75 HC-$1.50 PLUS POSTAGE
DESCRIPTORS	*Early Childhood; Grade 1; *Identification; Kindergarten; *Learning Disabilities; *Low Achievers; *Screening Tests
IDENTIFIERS	Early Identification Screening Inventory (EISI); Motor Perceptual Diagnostic Inventory (MPDI)

ABSTRACT

This paper reviews the history of developing techniques to identify learning problems in children. Dr. Eugene Medvehoff's approach to identifying potential learning problems in young children is delineated. The system evaluates six areas of pupil behavior; visual, visual motor, speech and hearing, physical and behavioral, psychomotor, and psychological. Materials have been designed to test and diagnose and to implement classroom curricula, in order to correct the learning impairments. Although developed specifically for kindergarten and grade 1, the materials may be useful to correctively treat students at any grade level. (SET)

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

ED 089837

EARLY IDENTIFICATION of LEARNING DISABILITIES

A Discussion and Approach

Prescriptive Educational Systems
1368 W. Exchange Street
Akron, Ohio 44313

PS 006883

Prescriptive Educational Systems

1568 W. EXCHANGE STREET
AKRON, OHIO 44313
PHONE: 216-836-6229

CONTENTS

Introduction	LEARNING
Stating the Case	THE PROBLEM
Background	THE HISTORY
Why Be Concerned	THE NEED
A Solution	AN APPROACH
Supportive Material	ATTACHMENTS & DATA
How & What to Order	MATERIALS

LEARNING

Learning ! Webster's Dictionary defines the word as: "the acquiring of knowledge or skill." But the definition alone overlooks the varieties in physiological equipment and psychological ability that individuals may bring to the task of acquiring knowledge or skill. There is, for example, the variety of abilities or capacities to learn existing within any given classroom of school children. Each child is exposed to the same presentation environment (external) but the degree to which each child can integrate this information into his background of experiences and can subsequently retrieve and apply it (internal) differs widely within any given classroom. However, that differences in the rate and ability to learn do exist is a fact of life. There are slow learners. What of the slow learner or the child with a learning impairment? Can concerned educators and their respective school systems effectively accomplish or even approach the early identification of children who will experience learning problems? Can this be done early enough in a child's school career to be preventative in nature, or must we always wait until after the fact and treat the slow learner with programs of remediation? Problems in learning, if not adequately dealt with, may result in antisocial behavior and life long disability. Can a truly preventive program be undertaken especially within the very real and practical constraints of time and funds? If so, can it be done early and extensively enough to benefit the child, the school, and society as a whole?

Some answers to these basic questions are implied in what follows, and is the purpose of this paper.

THE PROBLEM

"Man, unlike lower animal forms, is not born with instictive patterns of behavior which would enable him to survive or adapt to the world around him. Patterns of adaptive behavior must be learned and a memory bank of appropriate adaptive responses stored. The higher order central nervous system functions like a probability computer and adaptive behavior requires available, learned responses...

...If a child is unable to accurately perceive his environment or incapable of initiating integrated adaptive and emotional responses, maladaptive behavior must follow. If these problems are not accurately diagnosed and specifically treated, there will be a re-enforcement of maladaptive behavior...

...Children with perceptual motor problems thus have an impaired ability to perceive the world around them and to initiate purposeful adaptive responses. They can react to the impingement of stimuli on their central nervous system to which they are unable to respond appropriately by flight or fight responses.

They may shut out stimuli which are greater than they can master and regress to autistic behavior. They may also respond with gross, poorly organized motor behavior. Hostility generated by frustration at their inability to cope with the world around them may be expressed outwardly in destructive behavior as externalized agression or may be internalized and result in self-destructive behavior.

Children with perceptual motor problems tend to have a lowered frustration tolerance. They are more irritable. They often have impaired impulse control. Thus until the problems are accurately diagnosed and specific remedial programs are instituted, tasks should be simple and the amount of incoming stimuli reduced...

Unless problems related to learning are diagnosed accurately and early the child will not be able to develop basic skills which are so important for academic growth and development. One cannot learn to achieve through failure. Those children who do not begin their school careers with certain fundamental skills may, unless some form of appropriate intervention is offered, become that group of children known as under-achievers who find school to be a distasteful experience in which they find no gratification. In remedial work with these children they must experience success. Tasks must be kept as simple as possible so the learning process can be positively re-inforced.

If these problems go unnoticed they can have a profound effect on the child's ability to achieve a place in the world where he can make some measure of positive contribution, no matter how small this may be. In the more devastating regressive responses to these frustrations, serious mental illness may result.

Those who find school a frustrating and unrewarding experience do not achieve their potential. They become negatively conditioned to school and frequently resentful because they must attend. This may lead to aggressive anti-social behavior. (See the attached Newspaper clipping - "Learning Failures Turn Their Lives To Crime")

All children with impairment in their ability to learn should be screened and accurate diagnostic methods should be employed. Once specific problems are defined and the limits within which learning can occur have been set, specific prescriptive, preventive or remedial programs should be instituted which will help the child to achieve positive re-inforcement of learning. This is not only a means of preventing serious emotional problems, but also a means of helping each individual to grow and develop as much as possible. This is the responsibility of our educational system."

Robert A. Jenkins, M.D.

Forward to New Dimensions In Learning

THE HISTORY

Historically, attempts at developing techniques for the early identification of learning problems have followed a number of divergent paths. These have included clinical approaches in which emphasis has been placed on psychological symptoms, on the basis of a socio-economic background with all of its cultural aspects, and on the basis of a medical model which has stressed the physiological basis for learning disability.

The language used by the various disciplines in reporting findings has presented a problem in semantics. Such terms as neurologically involved, minimally brain damaged, aphasoid, educationally retarded, hyperkinetic syndrome, and central nervous system dysfunction while having very real meaning with a specific specialty, have tended to create an aura of confusion for day to day practioneers in the field on education.

As a result no universally accepted definition of factors which constitutes learning problems has been evolved. Proposed definitions have reflected the research studies within each specialty. Language barriers between specialties have made it difficult to integrate research findings into a common metaphor. The result has been an ever-growing reluctance on the part of non-specialists to enter into this maze of terminology, in search of findings which have practical application in a non-clinical setting.

A review of pertinent studies indicates that the major concern for early identification has been in the area of brain damage. The statistical prevalance of brain injured children varies widely according to researchers in the field. Doll (1933) has shown that 6 to 10% of the children in Vineland Mental Hospital had motor defects due to brain damage. Armitage (1946) reported that 2.3% of children under eighth grade level had brain damage. In studying infants at 10 months of age, Knablock & Pasmanick (1959) found that 12.2% had possible minimal damage, 13.4% had minimal malities. Coleman (1964) has reported that approximately .5% of school age children in the country have some form of epilepsy, and that roughly 15,000,000 people in the U.S.A. suffer from some form of neurological disorder.

It should be noted that studies reported in the literature have been done, by and large, in essentially clinical settings. The implication being that children seen in hospitals and mental hygiene clinics have already been identified in some measure by virtue of having been referred to an outside agency for help. While such studies have provided valuable insight into the behavioral manifestations of brain damaged children, it is not felt that generalizations from these findings to a general population of children is valid.

There has been a growing tendency in modern education to equate "brain damage" with learning disability. While the premise is valid, it cannot be said with certainty that brain damage is <u>necessarily</u> manifested in the form of learning difficulty. Thus, an undue concentration in this field of study has had the effect of distracting attention away from other physiological difficulties which could be contributing to learning problems.

From a practical point of view, it would be impossible to assess learning potential by use of a pure medical model. Hunt (1943) has noted that the physical symptoms of brain damage are not always revealed in a neurological examination. If diagnosis were to depend solely on this procedure, many would go undetected.

Another aspect vital to identification is the question of time. Diagnosis in the medical setting is limited to the time at which the examination takes place. If a positive identification of neural disorder is found, the problem is resolved. However, the child may very well develop problems after the examination. Having once been examined for a central nervous system dysfunction, and having been given a clean bill of health, it would not be likely that the child would be referred for this purpose again. Effort would probably then be concentrated in other areas.

As has been previously noted, the ideal time for making an identification of learning problems is during the pre-school developmental period. The problems presented by use of this approach are practically insurmountable. Ideally, this responsibility should rest with the parent. The level of parental sophistication in this area is not only poor, but is clouded with emotional and social overtones.

It has been suggested that the medical profession should assume some responsibility in this field. However, the practicality of such a suggestion is questionable. Parents, as a rule, do not take children to a physician's office under circumstances which make such assessments possible. The physician usually sees a child because of a specific physical problem that is creating discomfort, and then for only an abbreviated period of time.

It would appear that the first effective identification of learning problems on a mass basis can only be accomplished in the school setting using teachers as observer-reporters.

The utilization of teaching staff for the purpose of identifying maladaptive behavior has been the subject of much study. In an early research, Wickman (1928) found that there was a marked difference between the attitudes of clinicians and teachers with respect to behavioral traits of children in the classroom. Teachers considered violations of classroom routine and transgressions on middle class morality as being major problems, whereas clinicians rated unsocial, withdrawal and recessive behaviors as being most serious. Another series of early studies (Laycock, 1934; Bain, 1934) indicated that teachers were aware of the seriousness of hyperkinetic behavior.

Paak (1954) examined the field of early detection of brain injury in relation to curriculum change. Using a direct observational technique, he developed a series of checklists measuring classroom maturity, social awareness, abilities and academic progress. These checklists yielded information in the following areas: thinking process, criticizing own work and the selection of suitable activities for personal gratification. The author stated that the completed lists gave a detailed picture of the child's assets and liabilities.

Semmel (1960) has reported that classification studies conducted in a clinical setting are so far divorced from the child's natural environment that it is unwise to generalize from findings in these studies.

Benson (1957) found that teachers were able to identify maladjusted children in the classroom. When these children were referred for more extensive study, teachers' judgements were found to be valid. Benson observed, however, that teachers tended to identify fewer children than did professionally trained personnel. He also found that teachers were able to make more identifications as their knowledge of symptoms increased.

Ayers (196.) studied teacher reports on a sample of students that had been experiencing learning difficulty in conventional academic areas. He also used teachers' ratings based on observation of hyperactivity, clumsiness and distractibility for this same sample. Scores on performance of perceptual sub-tests were used as an additional criterion. It was found that on a battery of 36 measures administered to both control and deficient groups, the latter group scored significantly lower on 33 of the measures. Perception of the vertical, eye-hand dominance agreement and unilateral hand dominance scores did not significantly differentiate these groups.

Teacher observations on behaviors such as nail biting, enuresis, thumb sucking, blinking eyes, stuttering, sex problems and poor motor coordination were used in a study by Beck (1959). He found that only poor muscular coordination significantly differentiated between organic and nonorganic groups.

Klebanaff, Singer and Wilensky (1954) found that even in the absence of obvious motor disturbance the brain injured child showed awkwardness and poor coordination in his performance. Such characteristics would become evident to the teacher after a prolonged period of observation. This finding was substantiated by Guskin (1962) who found that ratings by nonprofessionals began to approximate those of clinicians when they had longer periods of time for making observations.

A Functional Organizational Scale consisting of 30 items which successfully differentiated emotionally handicapped children was developed by Barsh (1962). After reviewing the diagnostic tests available for identifying brain damage, he concluded that actual tests seldom present sufficiently valid diagnostic results. Results of administration of this scale to children ranging in ages from 1 to 16 indicated a high and positive correlation between observed behavior and clinical diagnosis.

Welbanks (1956) used a questionnaire to assess behavioral factors observed in mentally retarded children. Questions were derived from behavioral symptoms reported in the literature. A significant difference was found between the mentally retarded and normal groups on the basis of teacher responses to the questionnaire.

Frostig (1963) compared teacher ratings of adjustment in the classroom against scores on visual-perceptual performance scores. A significant correlation was found between teachers' ratings and test scores.

Utilizing a Pupil Behavior Rating Scale, Bower (1958) concluded that on the basis of teacher reliability in reporting observed behavior "...teacher ratings, self descriptive data, and peer ratings when combined give the clearest, most comprehensive and economical picture of the adjustment status of children."

PS 006883

Henry and Rudder (1963) in re-evaluating Bower's rating scale found that 12.7% of the children rated were classified as emotionally disturbed by teachers. These ratings did not correlate highly with clinical evaluations. The authors were also critical of the cost of time required to administer the scale.

Trippe (1963) has concluded, however, that it is not realistic to validate teachers' judgments against those of clinicians. The role of the teacher is quite different from the role of the clinician. The trend is to encourage the teacher to assume the role of the "psychological observer", to develop an awareness of problems, and to develop an understanding of their underlying symptoms so as to make proper referrals.

The studies presented here are a minute representation of the work done in this area. It is felt, however, that they do represent a cross section of contemporary thought in the field of identification.

The re-current theme is emphasis on the identification of the brain damaged child. Very little research has been attempted in making early identifications of children who are likely to exhibit learning difficulties from a normal population of their peers. The need in this area is of such magnitude as to over-shadow the emphasis placed on other areas of identification research. There have been several factors inhibiting the development of good research in this field. Primarily a lack of statistical sophistication in the treatment of rating scales. Another ever existent problem in all research has been the isolation of criterion measures which would not vanish under cross validation or replication studies.

THE NEED

From an educational, social, and economic frame of reference, there is no more pressing need in the academic world than that which deals with the early identification of children who will experience learning difficulties.

In the school setting the child is measured by tangible letter or number grades. This is an on-going process, and is reflective of the child's ability to learn or assimilate given amounts of material within specified periods of time. Existing academic curricula have in large part determined both the pace and quantity of materials to be learned. It must be remembered, however, that educational teaching materials are developed by or in conjunction with personnel who are or who have been actively engaged in classroom teaching. As such, these materials are usually geared to the mean or average performance that currently exists in the school setting.

A performance score on these materials is obviously related to the average performance of the group. Low performance scores would then seem to indicate that materials developed for the norm group do not meet the needs of those who fall below mean group achievement scores.

Obviously, the foregoing is an over simplification of the problem. There are other variables which also must be considered. These include teacher effectiveness, the unrealistic demands for quantities of materials to be learned, the type of testing utilized for assessment of learning, and on how well previously learned materials have been integrated and used by students.

Since the educational process is built on a step by step progression, the rationale presented appears to be valid. However, this explanation applies primarily to those students who have spent some period of time in the classroom. For these children, achievement scores become the identifiers of learning problems, but always after the fact.

For the low achieving child, the implication of poor scores is resolved in remediation, but again after the fact.

Implicit in any remedial teaching process is the psychological effect of negative reinforcement. Remediation implies a previous failure in achievement, and continuing exposure to that failure is emphasized in every single contact that the student makes or has with the remedial activity.

Hopefully, the student is able to strike a balance between his previous failure and his current success with the same material. Unfortunately, this is the exception and not the rule. This for many reasons.

First, one must consider the unavoidable fact that most children who do not achieve well in a single area also experience difficulties in other related areas. Another unpleasant reality is that the world of learning goes on day by day, and time taken out for remedial activity is time taken from materials under current study. Once started on a program of academic remediation, the student rarely catches up. Unfortunate, but true.

Educationally, such a child is usually forced into a pattern of normative academic conformity. He is promoted because of size because of parental or administrative pressure, a lack of special facility to handle learning problems within a system, or in compliance with legal statutes requiring compulsory attendance to a given age.

This child is caught up in a relentless forward stream of movement, in a setting which provides no success experience, and which, in fact, reinforces the behavior of avoidance. At the appropriate legal age, such a child is likely to drop out. The implications for the future social life of such a child are so obvious as to require no further comment. Economic implications fall into the same category. In our culture, economic and social factors are inextricably bonded and they jointly determine the welfare status of the individual.

The economic cost for the support and maintenance of such a group of people grows larger year by year. However, there is another cost which cannot be measured. This figure represents the loss of potential earning and the loss of significant creative contribution to our society in other less tangible areas.

The ever growing number of specialties in remedial education is symptomatic of the deficiencies in our system. Curriculum, teaching techniques and technological devices cannot in and of themselves reverse this trend.

In our haste to create a pool of "brain power", we have overlooked some very basic and irrefutable evidence gleaned from past studies in learning and motivation. Knowledge developed in the area of individual differences has been overlooked in the attempt to develop high level achievement across larger numbers of children. The emphasis has been on excellence, speed to time of learning, with a de-emphasis on practical application of learned materials in favor of a concentrated attack on concept and theory.

There has been a disregard for what is known regarding learning abilities in a normal population. This curve has held up under countless studies. It has graphically indicated that 68% of a normal population will academically perform at approximately the same level. It also indicated that roughly 16% of a normal population will function below this level. Within individual educational systems, this percentage of low achievers may approach 1/3 of the total school population.

Obviously, some consideration must be given to the selection of children into learning groups. This process should take place as early as possible in the academic career of each child.

Selection instruments for this purpose have been developed. At an early level they are concerned with "Readiness" for learning. Historically, these instruments have not proved to be effective predictors of future academic success.

Selection instruments used for differentiating students at later academic levels are essentially measuring what has already been achieved. They are, in most instances, redundant and reveal little that is not already known.

Still another technique for selection has been the wide spread use of the intelligence quotient. Once again, studies have indicated that while this approach has been the best over-all predictor, it has many shortcomings. It is one thing to have potential, it is quite another thing to be able to make use of it. There are intervening variables affecting the organism which are not measured, or measurable, by paper and pencil techniques.

The overall fallacy inherent in using the techniques described is that they all, in varying degrees, measure contemporary achievement.

It would seem that a new direction must be taken if this problem of early identification is to be brought into the realm of predictive feasibility.

The approach and developments reported here are based on the assumption that observable classroom behaviors are related to learning, and that with appropriate instruments and instruction the teacher becomes more qualified to perform in the role of educational diagnostician.

Ultimately early identification procedures should lead to the development of a preventive rather than remedial educational philosophy.

AN APPROACH

Who Developed It?

A noted psychologist, Eugene Medvedeff, Ph.D., developed it with the cooperation, assistance and advice of a broad spectrum of professionals. These professionals included psychologists, medical doctors, teachers, school administrators; and through extensive research of appropriate behavioral and developmental literature.

Why Was It Developed?

It was developed as a response to the growing awareness of the need for a suitable and reliable early identification instrument. Two factors prompted Dr. Medvedeff to act: 1) the growing number of students with learning disabilities seen by the doctor in his private practice, 2) the fact that non-achieving students may account for as much as one-third of the total population within an individual school system. These students represented a vast and unnecessary loss of potential talent, because they were identified only after problems already existed and were causing difficulties. It was his conviction that most, if not all, these students could be brought to normal grade level achievement or at least permitted to fully develop their potential to learn, if they could be identified and treated early enough in their school career to avoid developing maladaptive behavior. They must be identified and treated before a re-enforcement of maladaptive behavior, transforms a simple physiological problem into an actual learning disability.

What Exactly Is This Approach?

It is a total concept providing for identification, diagnosis, and correction of learning impairments. It is specifically an early identification and correction system for use primarily in kindergarten and first grade classes. It is classroom oriented and total in scope.

How Does It Function?

Phase I (Identification)
- Teacher observation of student behavior
- Teacher evaluation questionnaire
- Identification (students with real or potential learning impairments)

Phase II (Diagnostic testing)
- Video tape instruction program (parents and teachers)
- Individual diagnostic testing
- Performance/Product scoring and evaluation
- Identification (specific learning difficulty)

Phase III (Curriculum programming)
- Readiness levels established (each student based on testing)
- Individual student progression (based on readiness)
- Positive learning re-enforcement
- Maximize individual learning potential (within bounds of learning problem)

Phases and Functions Discussed:

Phase I - Reliance is placed on the teacher's normal professional abilities as an observer of student behavior. Since the EISI (Early Identification Screening Inventory) form is simple and direct, there is little time or effort expended to achieve a 95% reliability in forecasting student's learning impairments. Simple "yes" or "no" answers are used to evaluate six areas of student behavior: 1) Visual Motor 2) Visual 3) Speech and Hearing 4) Physical and Behavioral 5) Psycho-Motor and 6) Psychological. (See Atchmts)

Phase II - A complete set of video tapes is provided. These tapes will inform parents and prepare teachers. Teachers will be specifically prepared to properly understand, administer, observe, score and evaluate a series of very simple individual diagnostic tests. The MPDI (Motor Perceptual Diagnostic Inventory) and FVMSI/POSI (Fine Visual Motor Screening Inventory/ Perceptual Organization Screening Inventory) are structured to reveal the particular problems that underlie learning difficulties, by evaluating the student's ability to perform three basic motions: 1)left to right 2) top to bottom and 3) counterclockwise. These three motions are considered basic and essential to success in all reading and writing skills. Areas measured by these tests include: 1) Gross Motor Ability 2) Co-ordination and Balance and 3) Neurological Maturity.(See Atchmts)

Phase III - Total curriculum programming and necessary materials will be provided for all kindergarten and first grade classes. These materials have been developed to be fully integrated and phased, providing students a gradual, readiness centered, predictable and sequential learning experience. Both Teacher Manual and Student Workbook are provided throughout the series beginning with Readiness I, Readiness II through the Language I and Language II materials. Let me here stress that this is not a curriculum supplement. It is a total classroom curriculum, complete with necessary workbooks and other materials including plastic overlays for workbook use. Materials have been designed to assist the student in overcoming learning handicaps by gradually developing mastery of the three basic motions mentioned above. Success achievement through readiness will provide positive re-enforcement of the learning experience. Long term results will be to bring each student to the peak of individual potential for a successful learning experience.

Is This A Tested Approach?

All materials available in this system have been fully field tested and normed. Evaluation, integration and phasing have resulted from actual classroom use over more than a five year period. Materials are currently being used in over 30 school systems spread through states from California to Florida.

Are There Other Uses?

Portions of the materials for this system have been, and may be used on a remedial basis for all age groups up to and including adults. Students at any grade level can be correctively treated with appropriate portions

of the system's materials. It has even been successfully used in teaching those with an IQ below fifty to read. This was not possible with other methods used in the past. There is no need to homogeneously organize classrooms according to achievers or non-achievers. Past experience using this curriculum for a heterogeneous mix of achievers and non-achievers resulted in total class improvement. Not only did non-achievers improve their scores, but achievers showed a marked improvement in their scores as well. These results were based on evaluation of scores earned on standard achievement tests given before and after the trial use of this curriculum. Readiness progression enhanced each student's individual ability to develop and grow at his own personal rate.

Summary

Professionally developed
Developed specifically for early (kindergarten and first grade) use
Thoroughly field tested in actual classrooms
Complete, Integrated and Phased
Validated and Normed
Simple to Use
Maximizes utility of teacher professionalism
Minimizes need for specialization without sacrificing final results
95% accuracy in screening identification
Low cost
Remedial utility (up to and including adults)
Single curriculum (maximizes both achiever and non-achiever development)
Thoroughly Tested (Data gathered and analyzed) (See Atchmnts)

ATTACHMENTS

&

DATA

Learning Failures Turn Their Lives To Crime

By JO THOMAS
Knight Newspapers Wire

THE FIRST time Detroit police picked up Robert, he was 10 years old. He had stolen some guns from a naval armory.

Robert had been a headache to his teachers long before then — although he was bright, he couldn't read. He misbehaved. He skipped school. At 13, he pulled an armed robbery with an ice pick.

IN DENVER, Michael was arrested for stealing a car, and police were surprised to discover he had also stolen every book in the public library about safe-cracking.

Michael, a graduate of one of Denver's prestige high schools, said he'd stolen the car in a fit of depression after failing to pass the written test to get into the Army. Michael couldn't read.

He'd conned every teacher at his high school into passing him. To bolster his charade as a good student, he'd joined every club at school and worn the best clothes — since he couldn't afford them, he cracked safes.

ROBERT, MICHAEL and what may be hundreds of other children across the nation have something more than trouble in common: They have serious learning disabilities which made them fail in school and at nearly everything else — even crime.

Reports trickling in from studies of juvenile delinquents in Michigan, Colorado and Rhode Island hint that as many as half suffer from physically based, correctible handicaps that no one diagnosed or corrected.

Instead of help, these children got — and returned — anger.

A child with a learning disability has normal or above normal intelligence, but somewhere in the miles of nerve tissue that circuit each human body, he has a tiny flaw.

It may keep him from mastering a skill such as writing, arithmetic or reading.

It may make him hyperactive, poorly coordinated, impulsive, distractible, withdrawn, immature, or uncooperative. He is, however, neither mentally retarded nor primarily emotionally disturbed — at least, not at first.

"A CHILD with a learning disability is a disorganized human being," explains Mrs. Dorothy Jens, a psychologist and vice president of the Michigan Association for children with Learning Disabilities.

"He gets no information from his senses that checks out."

He may be unable to use and understand words because he only sees them in parts — not wholes. He may confuse left and right, reading words and letters backwards. He may not be able to distinguish between sounds.

"Conventional approaches to teaching these children do not work," says Mrs. Jens.

CONVENTIONAL approaches are nothing short of disastrous, contends Dr. Chester D. Premaba, chief psychologist at Denver's Juvenile Court for the last 10 years.

"A kid goes to school every day and doesn't learn. He's intelligent, but he can't do as well as kids who aren't as bright as he is. People call him lazy, crazy. He's doing his best, but he can't cut it. And every day he has to go to school and fail.

"A kid who's sharp and can't read sometimes develops prowess in cunning. He becomes a con artist. Then, instead of understanding what he's covering up, we get angry because he's a con artist.

"Very often, these kids are very emotionally disturbed — as well they should be. After years of frustration, if you're not emotionally disturbed, you should be dead. Instead of seeing this as the healthiest sign about this kid, we treat it as his most horrible disease."

DR. PREMABA has examined juvenile delinquents for neurological disorders and estimates 50 pct. are afflicted with at least one disability. The tests he has used are rarely administered by juvenile courts because they are expensive. Each costs from $200 to $300.

Research on the contribution of learning disabilities to delinquency has been as sparse as it is expensive.

Dr. Allan A. Berman, a University of Rhode Island psychologist, found that 17 of 30 delinquents he tested at random had physiologically-based learning disabilities. Two others were borderline cases.

Dr. John Young, director of the Northwest Michigan Child Guidance Clinic in Traverse City, found that all 19 children who appeared in juvenile court in Roscommon County between September 1969 and September 1970 had learning disabilities. Only one was mentally retarded.

DR. Patricia Carpenter, director of psychological services at the Wayne County-Detroit Area Juvenile Court's Clinic for Child Study, says at least 50 pct. of the children who come through the court have learning disabilities.

A handful are enrolled in a Saturday tutoring program manned by volunteers.

"I don't know how much we can teach in two hours once a week," says Joe Avore, who directs the program. "But we do seem to be doing something. One fellow who couldn't say the alphabet is now reading at a second grade level. When we got him, he was in the sixth grade — what was he doing there?"

BUT THE COURT is in the criminal justice — not the educational — system.

"There are 22,000 school teachers in Wayne County," says Juvenile Court Judge James H. Lincoln. "If they can't teach the kids to read, we sure aren't going to teach them with 120 probation officers."

Children with learning disabilities can be helped. If parents, doctors, and teachers fail to understand their problem, however, they remain disabled. And a few of these victims then victimize society.

As the problem gains recognition schools are beginning to develop programs to find children with learning disabilities and to help them.

Early Identification Screening Inventory
Scoring

Seizure Indicators (Petit Mal)	Yes Responses by Item Number
Physical and Behavioral	35, 36, 38, 39, 40, 41, 44, 46, 47, 49, 50, 51, 52, 55
Psycho Motor	59, 63
Psychological	64, 99

Immature Readiness Behavior

Visual Motor	2, 3, 4
Visual	6, 11, 13, 17
Physical and Behavioral	28, 30, 37, 38, 44, 45, 52
Psycho Motor	56, 57, 58, 59, 60, 61
Speech/Hearing	19, 20, 23
Psychological/Factors	65, 66, 67, 71, 72, 74, 93. 95

Predicting Reading Problems

Kindergarten	7 or more yes responses from the total 100 possible
First Grade	6 or more yes responses from the total 100 possible
Second Grade	5 or more yes responses from the total 100 possible

Chi square comparing frequency of "Yes" responses on the E.I.S.I. between high and low reading readiness at the Kindergarten level.

Groups	Total number of "Yes" responses per protocol		Total
	≤7	>7	
0 - 32 (Lee Clark)	5	30	35
56 - 62 (Lee Clark)	22	8	30
Total	27	38	65

$X^2=23.16$ df=1
$p<.001$

Chi square comparing frequency of "Yes" responses on the E.I.S.I. between high and low achievement readers at the 1st grade level.

Groups	Total number of "Yes" responses per protocol		Total
	≤6	>6	
Low reading achievement (Lee Clark)	21	39	60
High reading achievement (Lee Clark)	35	19	54
Total	56	58	114

$X^2=10.23$ df=1
$p>.001$

Early Identification Screening Inventory Summary
Comparison of Mean Scores on Achieving and
Non Achieving Kindergarten Boys

	Visual Motor	Visual	Speech & Hearing	Physical & Behavioral	Psycho-Motor	Psycho-logical	Total
Achieving Boys	.4	.00	.00	.60	.40	1.20	2.60
Non Achieving Boys	2.66	1.10	2.06	6.62	3.60	6.21	22.25

Early Identification Screening Inventory Summary
Comparison of Mean Scores on Achieving and
Non Achieving Kindergarten Girls

	Visual Motor	Visual	Speech & Hearing	Physical & Behavioral	Psycho-Motor	Psycho-logical	Total
Achieving Girls	1.50	.00	.25	3.25	.75	1.00	4.75
Non Achieving Girls	2.00	.89	1.57	5.24	2.70	5.24	17.64

Early Identification Screening Inventory Summary
Comparisons of Mean Scores on Achieving and
Non Achieving First Grade Boys

	Visual Motor	Visual	Speech & Hearing	Physical & Behavioral	Psycho-Motor	Psycho-logical	Total
Achieving Boys	.58	.16	.32	1.50	.74	1.11	4.42
Non Achieving Boys	2.03	1.31	1.44	4.53	2.44	3.87	15.94

Early Identification Screening Inventory Summary
Comparison of Mean Scores on Achieving and
Non Achieving First Grade Girls

	Visual Motor	Visual	Speech & Hearing	Physical & Behavioral	Psycho-Motor	Psycho-logical	Total
Achieving Girls	.61	.18	.42	1.24	.68	.63	3.76
Non Achieving Girls	1.86	1.43	.93	3.64	2.50	2.86	13.21

Chi square comparing frequency of "Yes" responses
on the E.I.S.I. between high and low achievement
readers at the 2nd grade level.

Groups	Total number of "Yes" responses per protocol		Total
	0 - 5	>5	
Low reading achievement (Metropolitan)	10	22	32
High reading achievement (Metropolitan)	19	13	32
Total	29	35	64

$\chi^2 = 9.04$ df=1
$p < .02$

Prescriptive Educational Systems

1568 W. EXCHANGE STREET
AKRON, OHIO 44313
PHONE: 216-836-6229

MATERIALS

The following is a list of materials now in print and available through our company. It should be stressed that these materials have been integrated and phased to form a sequential and developmental learning "system". Individual or selective use, while it is possible, is not recommended. Maximum benefit is best achieved through progressive (Phased) use of the materials.

General Information

Information Kit Background/Information	Free
New Dimensions In Learning Philosophy of Early Identification Approach (Text)	$7.95

Phase I - Identification

EISI (Early Identification Screening Inventory)	
Set (10) + Class Roster and Instructions	$1.50
Individually	.10

Phase II - Testing

MPDI (Motor Perceptual Diagnostic Inventory)	
Set (50)	$5.50
Individually	.15
Card Sets	
FVMSI (Fine Visual Motor Screening Inventory)	$3.50
POSI (Perceptual Organization Screening Inventory)	$3.50
Scoring Pad (50) per pad 1 pad good for scoring both FVMSI & POSI	$1.50

Phase III - Curriculum Materials

Readiness I	
Pupil Workbook	$1.75
Teacher Manual	$2.00
Readiness II	
Pupil Workbook	$1.75
Teacher Manual	$2.00
Language I	
Pupil Workbook	$2.25
Teacher Manual	$2.75

Materials will be forwarded upon written request. No payment need accompany requests. Billing will follow shipment by separate invoice.

Prescriptive Educational Systems

1568 W. EXCHANGE STREET
AKRON, OHIO 44313
PHONE: 216-836-6229

The following is a list of materials in progress and not currently available. Work on these materials is under way, with availability expected in the not too distant future.

Language II

This is the next sequential step in the curriculum materials developed for the student "Readiness" series. It is an intensified program of communicative skills begun in the Language I program. It is intended for First and Second Grade Classroom use.

Arithmetic

This will assist the teaching of arithmetic concepts in a new and more readily understandable fashion. It is especially helpful in developing mastery of abstract mathematical reasoning skills. A new approach makes use of simple yet illustrative concrete symbols in presenting abstract principles. Intended for Kindergarten and First Grade Classroom use.

Listening Skills

This program will assist the development of listening skills in co-ordination with fine visual motor and eye-hand tasks. Part of a see-say-do, multiple sensory developmental approach to learning skills.

Visual Training Kit

This kit provides cards and instructions for developing both visual tracking and vocabulary skills with simple yet developmental occular exercises. Intended for Kindergarten, First Grade and Second Grade Classroom use.

Perceptual Training Kit

This kit provides for development of both perceptual recognition, and visual tracking skills. The main difference between this and the Visual Training Kit is the emphasis, here placed, upon recognition and differentiation of objects and perceptual acquity rather than in verbal or vocabulary skills. Intended for Kindergarten and First Grade Classroom use.

Visual Fixation Kit

This kit provides the capability to exercise a child in the process of visually fixating between near point and far point symbols. Cards are so designed to provide practice and exercise in developing both arithmetic and language skills, while exercising eye motility for both near and far point fixation. Intended for Kindergarten, First Grade, and Second Grade Classroom use.

Vision Testing Kit

Provides a very accurate yet simple testing of three planes of vision: 1) Near Vision 2) Far Vision and 3) Depth Perception. Intended for use by teachers and psychologists.

Prescriptive Educational Systems

1868 W. EXCHANGE STREET
AKRON, OHIO 44313
PHONE: 216-836-6229

ORDER FORM

Quantity Desired	Item	Cost Per Item	Total
____	Information Kit	Free	
____	New Dimensions In Learning	$7.95	____
	EISI		
____	Sets	$1.50	____
____	Individually	.10	____
	MPDI		
____	Sets	$5.50	____
____	Individually	.15	____
	Card Sets		
____	FVMSI	$3.50	____
____	POSI	$3.50	____
____	Scoring Pad	$1.50	____
	Readiness I		
____	Pupil Workbook	$1.75	____
____	Teacher Manual	$2.00	____
	Readiness II		
____	Pupil Workbook	$1.75	____
____	Teacher Manual	$2.00	____
	Language I		
____	Pupil Workbook	$2.25	____
____	Teacher Manual	$2.75	____
	Plastic Overlays		
____	Sets	$1.00	____
____	Individually	.10	____
		Grand Total	$ _____

Ship Order To: Name _____
Street Address _____
City _____
State _____ Zip _____

Send Bill To: Name _____
Street Address _____
City _____
State _____ Zip _____